



Climaster Comfort Air Conditioner

(AUS) Operating instructions
Installation instructions

To be kept in the vehicle!

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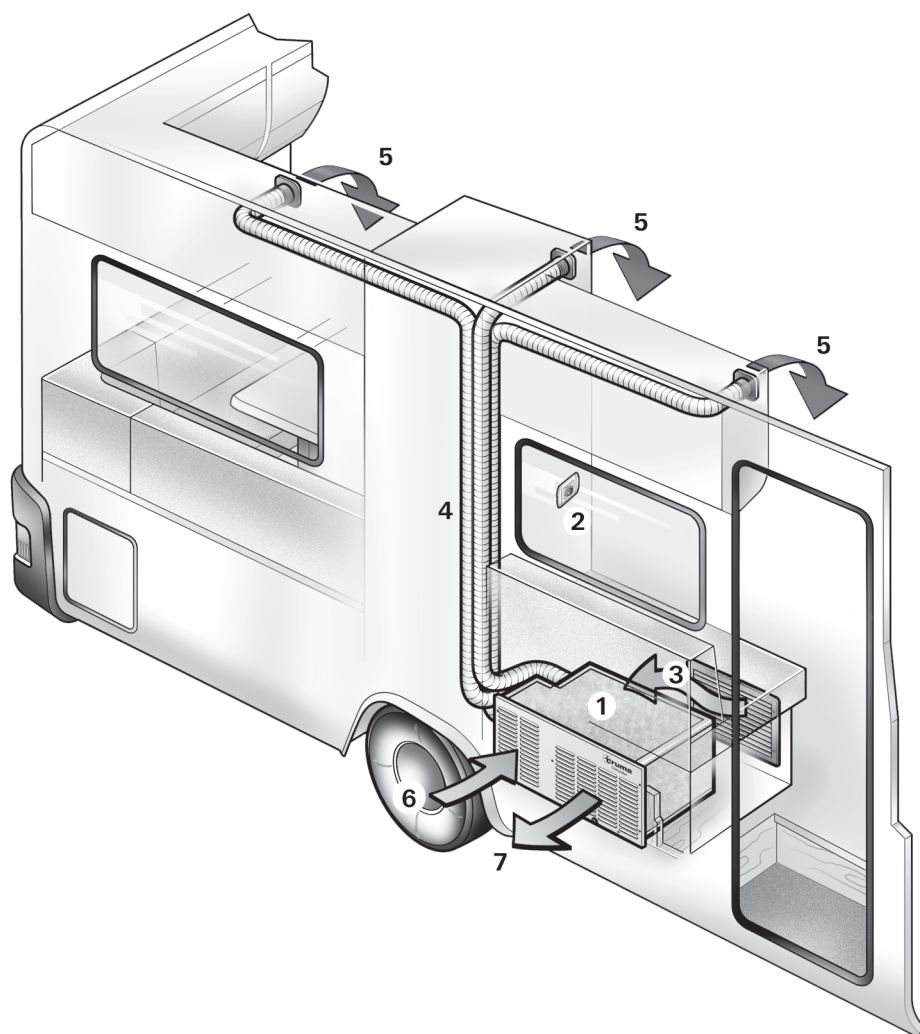


Fig. 1

Installation example

- 1 Air conditioning unit Truma Climaster
- 2 Control panel
- 3 Indoor air return with filter
- 4 Cold air ducts
- 5 Indoor air outlets
- 6 Outdoor air intake
- 7 Outdoor air outlet

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Symbols used



The device must only be installed and repaired by an expert.



Symbol indicates a possible hazard.



Note containing information and tips.

Safety instructions



Repairs may only be carried out by properly qualified professionals!

This device may be used by children aged 8 years or above and by persons with reduced physical, sensory or mental capabilities or lack of experience and/or knowledge, provided that they are being supervised or have been given instruction with regard to the safe use of the device and have understood the potential risks. Children must not use the device as a plaything. Cleaning and user maintenance must always be carried out by an expert.

To avoid damage during transport, the unit must only be dispatched after discussion with the Truma Service department (see rear page).

Any work involving connection or interconnecting wiring must be conducted by a licensed electrician.

The voltage must be disconnected at all poles before the housing is opened.

The unit fuse, 240 V, 3.15 A (IEC 127) is located on the electronic control board in the device, and may only be replaced by a fuse of the same design.

Unit fuses and connection leads may only be replaced by a licensed electrician.

Any alteration to the unit, or the use of spare parts and functionally-important accessories which are not original Truma components, or failure to respect the Installation and Operating Instructions, will lead to the cancellation of the guarantee and to the exclusion of claims for liability.

The cooling circuit contains the refrigerant R 407C, and may only be opened by a properly qualified person.

The indoor air outflow and the return air intake must not on any account be obstructed. Please bear this in mind in order to ensure the trouble-free operation of the unit.

The apertures on the side of the vehicle must be kept free of dirt and snow slush.

In order to avoid damage to the compressor, when the unit is in operation during transit (for example, with the generator or voltage transformer working), do not attempt uphill or downhill gradients of more than 5°.

Do not allow the unit to run for extended periods in a tilted position, since the condensation water which forms may not be able to run off, and in the worst scenario might penetrate into the vehicle.

Before switching on, it is essential to make sure that the fuse system for the power supply at the camp site is sufficient for 950 W (240 V – at least 4.2 A).

The power supply cable for the caravan (minimum cross-section 3 x 2.5 mm²) must be unwound completely from the cable drum.

Operating instructions

Always observe the Operating Instructions and “Important Operating Notes” prior to starting! The vehicle owner is responsible for ensuring that the unit can be operated in the proper manner.

Control Panel

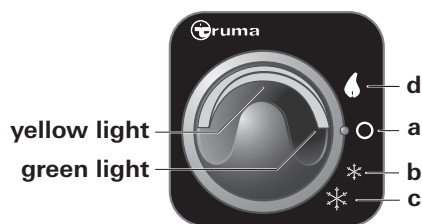


Fig. 2

Cooling Operation

1. Turn selector on the control panel to the “b” position for cooling at low fan speed or “c” for cooling at high fan speed.

Note

The indoor fan starts immediately and the green light is displayed. The compressor starts approximately 30 seconds later.

2. Set thermostat to a temperature for your individual requirements (wide blue bar – is maximum cooling).

Note

If the room temperature is below 20 °C, the compressor will not operate and the yellow light in the control panel will come on.

i Once the set temperature on the control has been reached, the green light will go out and the compressor will switch off. The indoor fan continues to run.

Heating Operation

1. Turn selector on the control panel to the “d” position.

Note

After switching on; the green light is displayed, after approximately 30 seconds the compressor starts and after further 30 seconds the indoor fan starts in low speed only.

2. Set thermostat to a temperature for your individual requirements (wide red bar – is maximum heating power).

i Heating is not possible at an outside temperature of less than 4 °C, as the heating power drops significantly. Between 4 °C and 7 °C the device briefly switches to thawing processes. Heating is possible without restrictions above 7 °C.

Switching Off

Turn selector on the control panel to the “a” position.

De-Icing

The de-icing cycle is associated with the heating mode. It will set into operation automatically if one of the sensors detects frost on any of the heat exchangers. The build up of frost would otherwise impair the cooling or heating capacity of the unit.

When the de-icing cycle begins the compressor and indoor fan will stop and after approximately 10 seconds the reversing valve will be switched on. 30 seconds later the compressor will re-start. The indoor does not run during the de-icing cycle.

The air conditioner will run in this mode until the frost has been removed and then will automatically resume normal operation.

Notes for the use of the air-conditioner

The Truma Climaster is recommended for pop-top caravans and caravans up to 4.8 m overall length, but requires that all walls and ceilings are insulated with a minimum thickness of 25 mm.

As far as possible, park your vehicle in the shade.

Darkening the interior with window blinds and / or a roof awning will reduce the penetration of radiant heat.

Clean the roof of the vehicle regularly (dirty roofs heat up more readily).

Before operating the device, ventilate your vehicle thoroughly, in order to allow the hot air which builds up inside to escape.

Take care when putting up awnings or similar that there are sufficient openings for the outdoor air to be discharged.

To create a healthy environment on the inside of the vehicle, the difference between the inside and outside temperatures should not be selected as too great. During operation the indoor air will be purified and dried. Due to the drying of the moist, humid air, a pleasant environment will be created inside even with slight temperature differences.

Keep the doors and windows closed while the cooling system is in operation.

The capacity of the air conditioner to adequately cool or heat is dependant on:

- Size of the caravan
- Insulation of the caravan
- Size and type of windows
- Shading
- Ventilation from indoor to outdoor

Maintenance

Return air filter

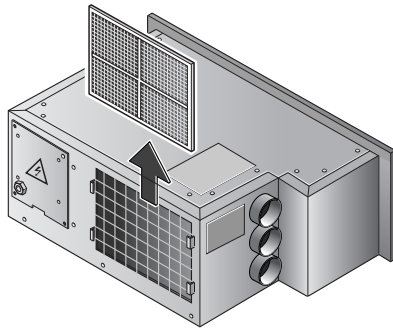


Fig. 3

The return air filter is located on the side of the unit and must be cleaned monthly.

If the air conditioner is in use in very dusty conditions and at high humidity, it should be cleaned weekly.

Take out the filter by bending it, clean in warm soapy water and replace.

Note

Never run the unit without filter. Without a filter the evaporator will become dirty, which in turn will impair the performance of the unit.

Condensation drain

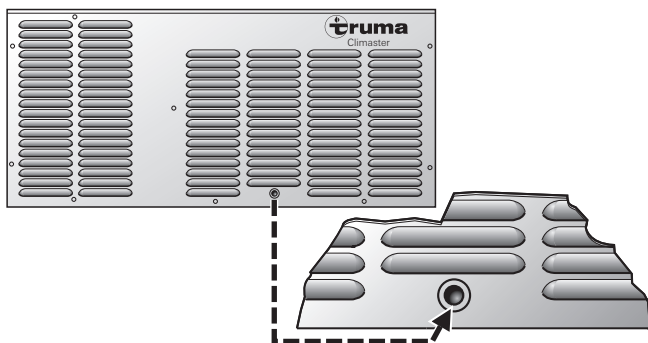


Fig. 4

The condensation water drain is located on the side of the vehicle. In order for the condensation water to drain away freely, a regular check should be made to ensure that the drain hose is free of dirt, vegetation residue, or similar obstructions. **If this is not done, there is a risk of condensation water penetrating into the vehicle.**

Fixing of the air conditioner

We suggest the securing of the air conditioner to the floor is checked after the first three months of installation and thereafter each 12 months. Insure the tie down belt is pulled tight and the unit is unable to move in any direction.

Disposal

The device must be disposed of in line with the administrative regulations of the respective country in which it is used. National regulations and laws (in Germany, for example, the End-of-life Vehicle Regulation) must be observed.

In other countries, the relevant regulations must be observed.

Technical data

Determined on the basis of EN 14511 or Truma test conditions

Designation

Climaster, Comfort air conditioner

Area of operation

up to 16'6" caravans (external)

Dimensions (LxWxH)

650 x 420 x 275 mm

Weight

approx. 32 kg

Power supply

230 V – 240 V ~, 50 Hz

Maximum nominal cooling capacity

approx. 2.2 kW

Maximum nominal heating capacity

approx. 1.9 kW

Power consumption

0.95 kW

Start-up current

20 A (150 ms)

Current consumption

4.2 A

Refrigerant

R 407C

Refrigerant content

470 grams

Compressor oil

Diamond MA32, 300 cm³

Maximum inclination of vehicle during operation

5°

Operational limits

+4 °C to +45 °C

- An icing sensor prevents impermissible formation of ice on the evaporator
- A temperature switch prevents excess current flow and excess temperature at the compressor.



Right to effect technical modifications is reserved!

Dimensions

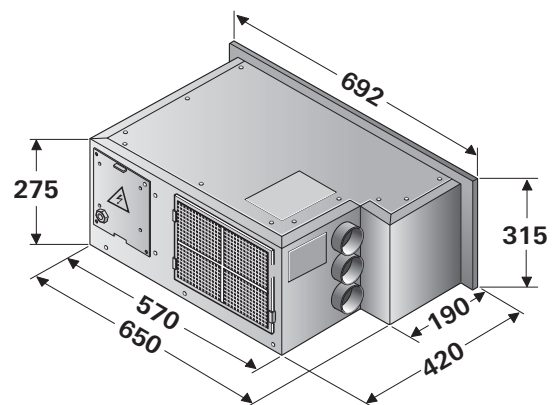


Fig. 5

All dimensions in mm.

Function diagram

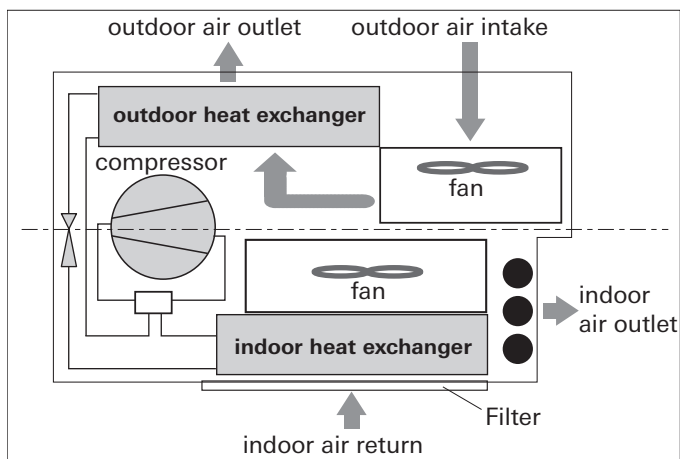


Fig. 6

Fault finding

Before calling Customer Service, please check the following:

Symptom

Cause

When switching on, the unit does not operate

– No supply voltage

Connect the caravan to the site supply and / or check residual current circuit breaker.

When switching on heating operation, the unit does not operate

– Temperature setting on the control panel to low

Set the ambient room temperature on the control panel.

When switching on cooling operation, the unit does not operate

– Temperature setting on the control panel to high

Set the ambient room temperature on the control panel.

Note

If the room temperature is below 20 °C, the compressor will not operate and the yellow light in the control panel will come on (only cooling mode).

Unusual high condensation on the unit or the cold air ducts

– Door or windows open (high humidity)

Close all doors and windows during operation and set to cooling high "c" on the control panel.

Unit operates for a prolonged period (heating or cooling) and then stops

– Indoor air filter blocked
– Aperture for the outdoor air blocked

Check the indoor air filter, the air intake to the stowage box (in which the unit is installed) and the aperture for the outdoor air (refer to maintenance).

Should these actions not resolve the corresponding problem, please contact Dometic Service.

Truma warranty policy

The warranty is given by Dometic Pty Ltd, Building 3B, Clayton Business Park, 1508 Centre Road, Clayton, Victoria, 3168, Australia for 12 months from the date of purchase against any defect arising from faulty materials or workmanship.

Repairs will be carried out during normal business hours only by Dometic Pty Ltd, or its duly authorised service agents, and are subject to the warranty conditions and exclusions hereunder.

Warranty conditions

- The company will only provide service on presentation of proof of purchase, on either the Truma product, or the Caravan / RV / Pleasure Craft in which the Truma product has been installed, to any authorised service agent. The purchaser must allow the service agent to photocopy the proof of purchase to facilitate his claim to the manufacturer.
- Warranty repairs can only be performed by authorised service agents and under no circumstances will Dometic reimburse repairs carried out by unauthorised persons. Tampering with any part of the product by unauthorised personnel will automatically void the warranty.
- The product must be used solely for domestic purposes only. If the product is used for commercial purposes the warranty is 6 months only.
- Where applicable, the products must be used on the appropriate electrical voltage, gas type and pressure, or fuel source.
- If at any time during the warranty period any part or parts are replaced with a part or parts not supplied or approved by Truma, this warranty shall immediately become void.

Important notice

Before calling a service technician please check carefully the operating instructions, service booklet and warranty terms and conditions. If the product fails for any of the reasons detailed therein, or is faulty due to abuse, misuse or improper installation, then a service fee shall be charged to the purchaser.

If you have any queries regarding the interpretation of the warranty you should contact Dometic Pty Ltd.

Whilst this book represents service outlets at the time of printing, changes occur from time to time. Should you have any queries or wish to locate your nearest authorised service agent please contact Dometic Pty Ltd.

Warranty does not cover

- Any appliance which has been:
 - (a) Subject to misuse, neglect, accident or alteration by any person.
 - (b) Damaged or destroyed by fire, flood, act of God or other inevitable accident.
- Fair wear and tear.
- Damage from foreign substances such as dirt or liquid.
- Travelling expenses or call out fee to and from authorised service agents premises.
- Accommodation or Site Expenses.
- Cleaning of the system. This is considered to be a part of normal product maintenance.
- Non operation of the appliance or resultant damage to the unit where the appliance has been operated in an out of level situation.
- Freight cost of the appliance or parts, to or from, point of service or transit damage.
- Dometic / Truma are not responsible for resultant loss or damage sustained by the purchaser.
- Non operation of the appliance or resultant damage to the unit where the appliance has not been installed, ventilated, flued or operated in accordance with the manufacturers instructions.

Apart from any warranties implied by the Trade Practices Act 1974 or any relevant State legislation all other warranties express or implied whether arising by virtue of statute or otherwise are hereby excluded.

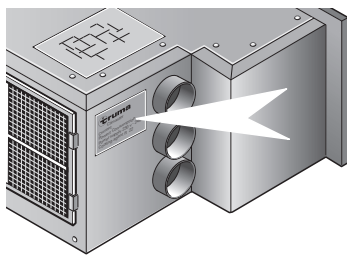
Installation instructions



Installation of the unit may only be carried out by properly qualified professionals.

This unit shall be installed in accordance with the manufacturer's installation instructions and any other relevant statutory regulations.

Data Label



The data label is located on the side of the unit, beside the indoor air outlets.

Fig. 7

Intended use

This device was designed for installation inside mobile homes and caravans. Any other applications are only possible after consultation with Truma.

Regulations

Any alteration to the unit, or the use of spare parts and functionally-important accessories which are not original Truma components, or failure to respect the Installation and Operating Instructions, will lead to the cancellation of the guarantee and to the exclusion of claims for liability.

Air conditioner kit

The air conditioner kit contains

- 1 Pre-assembled air conditioner
- 16 Screws 19 x 4 mm (pointed)
- 1 Outer wall grill cover
- 11 Screws 19 x 4 mm (flat)
- 10 Plastic spacers
- 1 Tensioning belt
- 2 Securing brackets
- 1 Wall switch with 3 m cable
- 1 Return air filter
- 1 Installation template
- 1 Set literature

Choice of location

Always install the unit in such a way that it is easily accessible for service work at all times and can be easily removed and installed.

Note

In order to achieve uniform cooling / heating of the vehicle, the air-conditioning unit must be installed **centrally** in a stowage box or similar mounting in such a way that the air distribution ducts can be laid vertically in covered areas (e.g. in clothes cupboards).

The air-conditioning unit is mounted on the floor. The indoor air which is to be cooled / heated is drawn in directly by the unit via an additional air grille in the stowage box wall (accessory, part no. 40040-29200) or via other apertures with a total surface area of at least 300 cm².

Caution

The indoor air will be purified and dried while the unit is in operation. Accordingly, if the unit is installed in external stowage containers (e.g. double floors) suitable steps must be taken to ensure that the air which is to be cooled / heated is extracted from the interior of the vehicle. The intake of indoor air from the outside can severely impair the effect of the air-conditioning system.

Template

Take the template provided and separate it on the dotted line (C) to two templates.

Inside the caravan

1. Temporarily tape the wall aperture template inside the stowage compartment in which the unit is intended to install and check the spatial conditions for the wall aperture.



The apertures in the vehicle must be freely accessible and must not be covered by any frame elements or similar objects located behind them. **Structural sections within the walls of the caravan should be avoided for safety reasons.**

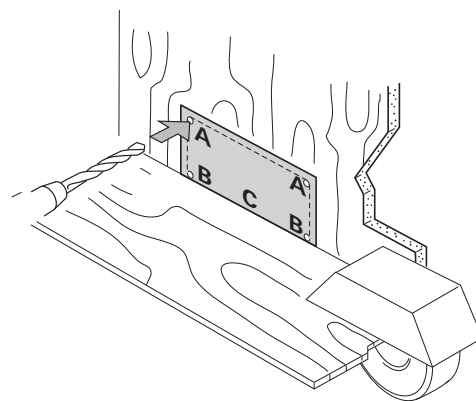


Fig. 8

2. After checking the spatial conditions, align the aperture template as shown and fix in position with adhesive tape.

Important Note

Ensure that the bottom line (C) is on the floor!

3. Drill 2 holes (A) with 10 mm dia. through the wall. Ensure that the drill is kept square to the wall.

Outside the caravan

The 2 holes drilled through the wall will allow the template to be positioned correctly on the outside wall.

1. Align the position of the template with the 2 holes drilled and tape to the outside wall. Ensure that the template is square to the caravan body.

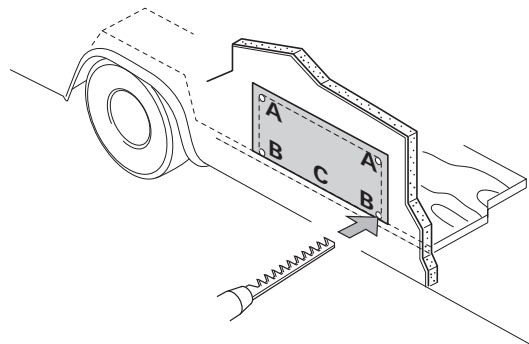


Fig. 9

2. Drill 2 holes (B) and check that the bottom line (C) is level with the caravan floor.

3. Using a jigsaw or padsaw cut to the lines shown on the template. Remove the template.

4. The hole in the caravan wall must be lined with timber to give a firm support for holding the unit in position.

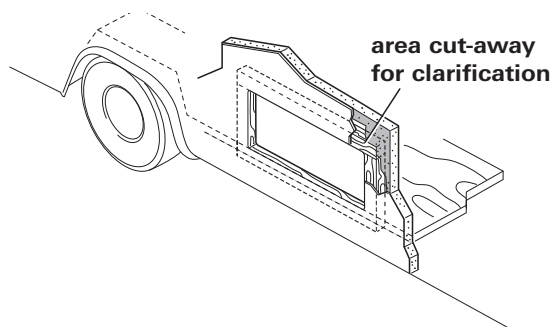


Fig. 10

Use a non hardening mastic to seal the the lining to the inner and outer walls – do not use silicone! Secure the inner walls to the lining with panel pins.

The finished hole should be 275 mm high and 660 mm wide.

Fitting the air conditioning unit

1. Take the second template and place inside the vehicle in such a way that **outer line (C) is level with the outer wall** and mark the points (E) for the securing brackets.

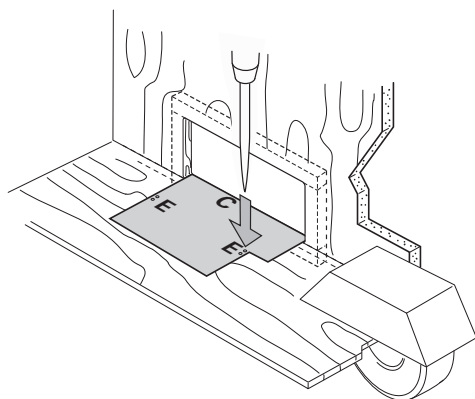


Fig. 11

2. Remove the template. Position the tensioning belt (1) and secure to the vehicle floor with the two securing brackets (2), using two screws (3) each.

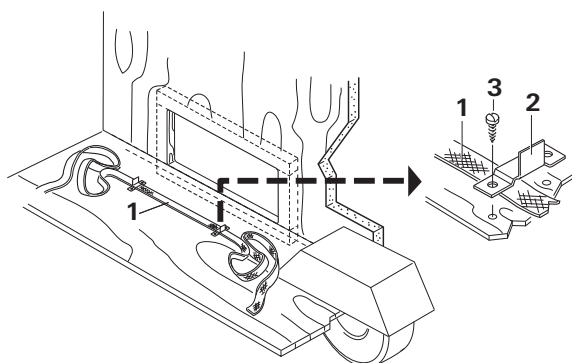


Fig. 12

3. Offer the air conditioning unit through the hole in the wall, making sure that the 240 V cable is not trapped under the unit.

Important note

To avoid damages, only hold the unit by the outer frame. Do not push against the inner part of the unit!

4. Beginning from the centre, secure the unit with the 12 screws provided.

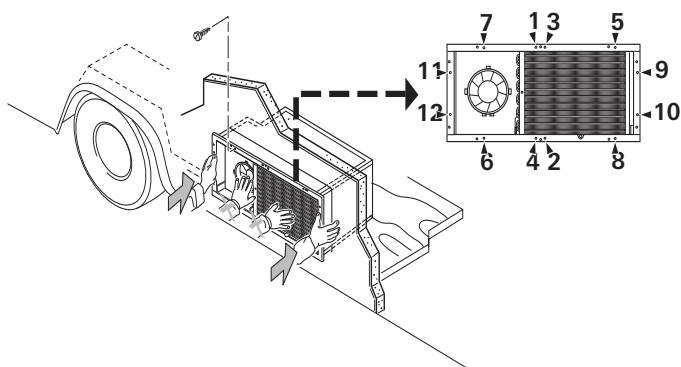


Fig. 13

5. Position the outer grille and beginning from the centre secure with 11 screws provided. Use the provided plastic spacers on the outer screws.

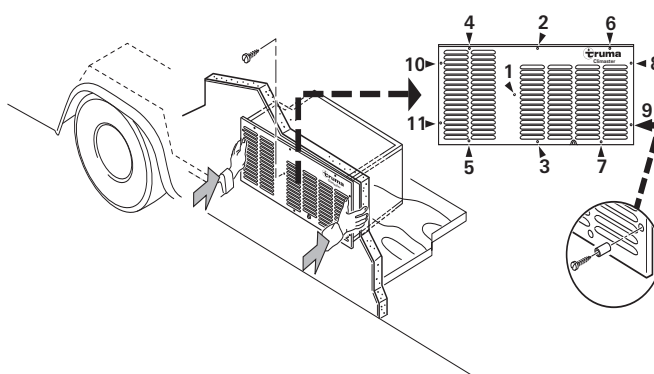


Fig. 14

! The condensation water drain is located on the side of the vehicle. In order for the condensation water to drain away freely, after the installation a check should be made to ensure that the drain hose is free of dirt, vegetation residue, or similar obstructions. **If this is not done, there is a risk of condensation water penetrating into the vehicle.**

6. Secure the air conditioning unit with the tensioning belt (1) as illustrated.

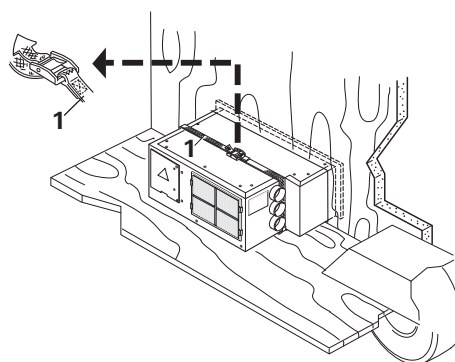


Fig. 15

Installation of the control panel

1. Choose a suitable location for the control panel in the vicinity of the unit (cable length 3 m).

If required, a cable extension of 5 m can be supplied (refer to page 10).

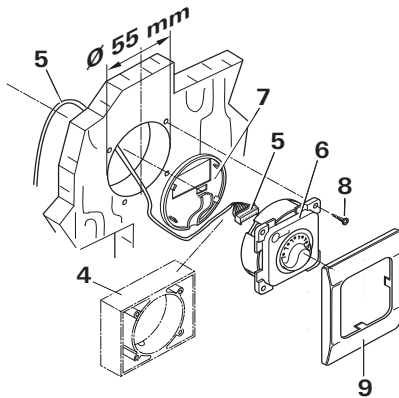


Fig. 16

Note

If a flush installation of the control panels is not possible, use the surface mounting frames (4) supplied.

2. Drill a hole 55 mm dia. Plug the cable (5) to the control panel (6) and then fit the rear cover cap (7) as a stress-relieving device.

3. Pass the cable through the hole, lay the cable to the air conditioning unit and plug it into the side connector. Secure the control panel (6) with 4 screws (8) and fit the cover frame (9).

Indoor air outflow and return

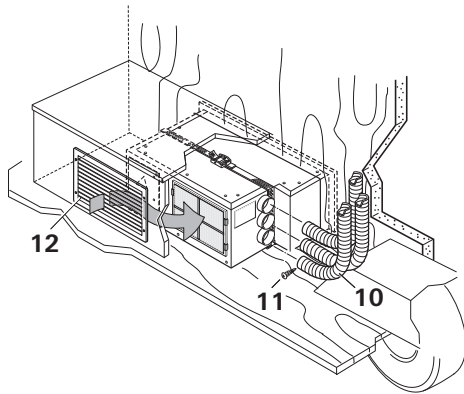


Fig. 17

Indoor air outflow

This unit was designed for the use of KR 65 cold air ducts (10), dia. 65 mm. The ducts must be secured to the device with screws (11).

The cold air duct must be connected to all three apertures, with at least one outlet.

Important note

The cold air distribution is designed for each vehicle type individually, on the modular principle. A wide range of accessories is available (see page 10).

To achieve the best possible performance, we recommend that:

1. The air outlets be fitted in the upper part of the vehicle (see installation example on page 2).

2. A maximum of 15 m cold air ducting to be used.

3. Lay the ducts as short as possible and in a straight line to the air outlets.

4. To avoid condensation water, do not lay the ducts in the vicinity of sources of heat (e.g. behind refrigerators).

Indoor air return

The indoor air is sucked in again by the unit, either through an additional grille (12 – special accessory part), for example in the wall of the stowage compartment or via a number of smaller apertures.

The unobstructed return air opening must not be less than a minimum of 300 cm².

Electrical connection 230 V / 240 V

⚠ The 230 V / 240 V electrical connection must always be made by an expert (in accordance with VDE 0100, part 721 or IEC 60364-7-721, for example, in Germany). The information given here is not intended as instructions for you to carry out. It is for assisting the expert assigned to carry out the job, acting as auxiliary information when connecting the appliance!

Establish the connection to the mains with the connection cable, 150 cm long, to a lead in the vehicle, fused to at least 10 A.

Always pay attention to connect carefully with the correct colours!

For maintenance and repair work a disconnecting device must be provided on the vehicle for all-pole disconnection from the power supply, with at least 3.5 mm contact clearance.

Function check

After installation, check all functions of the unit as specified in the operating instructions.

The operating instructions must be handed to the owner of the vehicle.

Accessories

1. Replacement return air filter
part no. 40040-61900

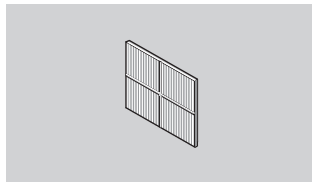


Fig. 18

2. Return air grille, (for return air from the living area to the installation area)
part no. 40040-29200

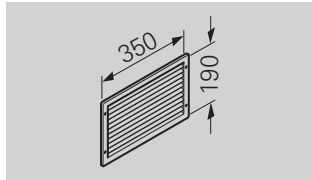


Fig. 19

3. Extension cable for the control panel 5 m
part no. 40040-54400

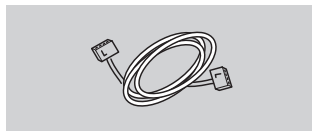


Fig. 20

4. Cold air duct **KR 65**,
dia 65 mm (per metre)
part no. 40200-01

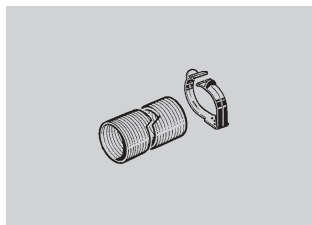


Fig. 21

6. Cold air channel,
(without connector muff)
part no. 40040-32200

7. Connector muff **AZ**
(to connect the cold air duct KR 65 to the cold air channel)
part no. 40040-24100

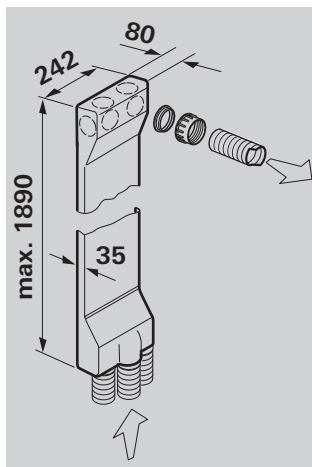


Fig. 22

8. Elbow **BG**,
(for narrow bends in the air duct)
part no. 39010-76400

9. T-pipe
part no. 40151-01

10. Y-pipe
part no. 40191-01

11. Straight connector **UM**
part no. 40161-01

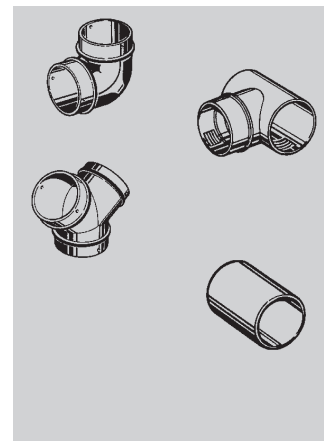


Fig. 23

12. Air outlet **EN**, black
part no. 40171-05

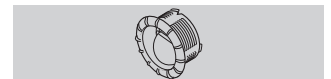
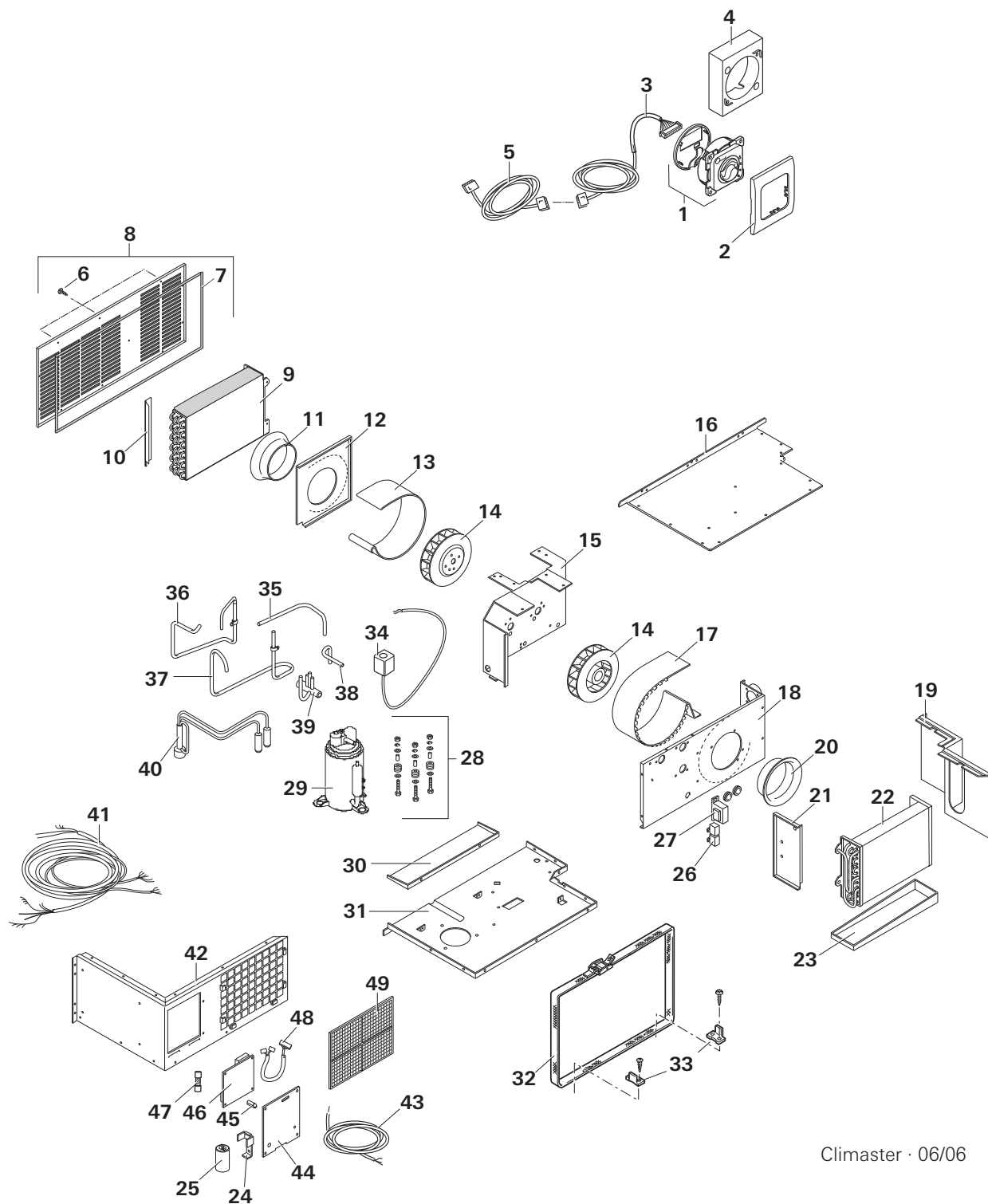


Fig. 24

13. Nut **EM**, agate grey
part no. 40181-01



Fig. 25



Climaster · 06/06

When ordering spare-parts, please always specify the fabrication number and year of make.



In Australia, always notify the Dometic Service Centre if problems are encountered; in other countries the relevant service partners should be contacted (www.truma.com).

Having the equipment model and the serial number ready (see type plate) will speed up processing.

Service (Australia)

Service (New Zealand)